

Office Action Summary

Application No.

10/688,094

Applicant(s)

KUMAR ET AL.

Examiner

PAUL DANNEMAN

Art Unit

3627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 April 2009 has been entered.

Response to Amendment

2. Claims 1, 10, 13 and 22 have been amended.
3. Pending Claims 1-28 have been examined in this action.

Response to Arguments

4. Applicant argues regarding the rejection of Claims 10, 11 and 12 under 35 U.S.C. § 101 that "Applicants respectfully submit that claim 10 is thus statutory since claim 10 recites a data structure having a function of translate invoice adjustment information into a common invoice adjustment data object format and the data structure is recorded on a machine readable medium." Respectfully, the Examiner must disagree that Claim 10 is statutory. The data of the data structure is configured to be used therefore it is really non-functional descriptive material. The MPEP § 2106.01 states "When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, do not make it statutory. See >Diamond v.< Diehr, 450 U.S. >175,< 185-86, 209 USPQ >1,< 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the

algorithm was in connection with the programming of a general purpose computer.”). Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) (“[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.”) (Quoted with approval in *Abele*, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) (“form of the claim is often an exercise in drafting”). “Therefore, the rejection of Claims 10, 11 and 12 under 35 USC § 101 is maintained.

5. Applicant argues regarding the rejection of Claims 1-28 under 35 U.S.C. § 103(a) that the cited portions of *Knauss* fail to disclose each feature of amended independent claim 1. As the independent claims have been amended, the Examiner has entered a new ground(s) of rejection. **Examiner's Note:** XML Schemas may also use Complex Empty Elements to achieve Applicant's invention. See **NPL_XML_Schema_CE.pdf**.

Double Patenting

6. A rejection based on double patenting of the “same invention” type finds its support in the language of 35 U.S.C. 101 which states that “whoever invents or discovers any new and useful process ... may obtain a patent therefor ...” (Emphasis added). Thus, the term “same invention,” in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. **Claims 1-28** are directed to the same invention as that of **claims 1-6, 8-18, 20-24, and 27-28** of commonly assigned **10/688,425**. The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

8. **Claims 1-28** are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of **claims 1-6, 8-18, 20-24 and 27-28** of copending Application No. **10/688,425**. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. **Claims 10, 11, and 12** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 10, 11 and 12 recite a data structure stored on a machine-readable medium which does not produce a useful, concrete and tangible result. The data of the data structure is configured to be used therefore it is really non-functional descriptive material.

Claim Rejections - 35 USC § 103

11. **Claims 1-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knauss et al., US 7,043,687 B2 hereinafter know as Knauss and further in view of Schwarzhoff et al., US 6,591,260 B1 hereinafter known as Schwarzhoff and further in view of NPL_XML_Schema_CE.

Claims 1, 10-13 and 22:

With regard to the limitations:

- *Receiving invoice adjustment information in an application-specific data object format from various software applications;*
- *Receiving configuration information related to the software applications is received at a transport layer, and*
- *The invoice adjustment information is comprised of an identification data element; invoice adjustment base data element; a billing data element; a status data element; and a list of invoice adjustment line item details data element;*
- *Translating the invoice adjustment information into a common invoice adjustment data object format;*

Knauss in at least Fig.3, Fig.4, Fig.5, Fig.9 and Column 2, lines 22-44 discloses a computer implemented method of automatically generating Electronic Data Interchange (EDI) documents or messages. The method includes receiving a source data model corresponding to EDI related data; the source data model includes metadata, mapping the metadata of the source data model to corresponding variables of a virtual document, and mapping the variables of the virtual document to metadata of a target data model. Once the variables are mapped (translated) the associated values of the mapped variables of the virtual document are then provided to the corresponding metadata of the target data model, in order to populate a target document or message with data from the source document or message. Knauss in at least FIG.3, Column 5, lines 64-67, and Column 6, lines 1-12 discloses a virtual document interface between applications and various types of messages or documents. Each application has a link to the virtual document interface, in which previously-defined mappings to variables of the virtual document are utilized in order to populate a target document or message, from a source document or message. Knauss in at least Column 6, lines 13-20 further discloses a system and method enabling automatic translation of EDI data to or from a self-describing markup language format such as XML, or an XML dialect, by way of a virtual document. Knauss in at least Column 5, lines 38-48 still further

discloses that an EDI message is a data element and may be an invoice or purchase order. That way an invoice or advance shipping notice can be taken from one source and converted to a format compatible with the second source.

Knauss does not specifically disclose the contents of the invoice data as having an identification data element, an invoice adjustment base data element, a billing data element, a status data element, and a list of invoice adjustment line item details data element, per se, however in at least Column 5, lines 38-63 discloses the use of a data element. NPL_XML_Schema_CE in page 1 and 3-7 discloses the use of Complex Elements (Empty Complex Elements) which may be defined as they are needed by a schema. Schwarzhoff in at least Column 5, lines 18-32 discloses the use of Polymorphic Schemas which allows a document type to be explicitly defined as an extension of a pre-existing document type. Schwarzhoff in at least Column 5, lines 33-67 further discloses an example of a business Purchase Order document with the use of a schema and redefining or adding an extension to one of the elements on a pre-existing document type. Schwarzhoff in at least Column 6, lines 1-17 further discloses one of the benefits of polymorphism is the expansion of the <Address> tag without a rewrite of the Purchase Order.

Therefore it would have been obvious, at the time of the invention, to one of ordinary skill to combine the well know features of Knauss with the well know Complex Element features of XML with the well known features of Schwarzhoff to include the elements (identification data element, an invoice adjustment base data element, a billing data element, a status data element, and a list of invoice adjustment line item details data element) using Complex Elements and polymorphism when providing invoice adjustment information to a client with the motivation to inform a client of changes made to an initial/original invoice.

Knauss in at least Column 9, lines 48-58 and Column 10, lines 1-3 further discloses that under control of the translator, values are written into the variables of the virtual document from the source data model in a data stream from the source data model to the target data model. Knauss in at least Column 9, lines 59-67 still further discloses that multiple target documents may be populated using data obtained from a single source document.

- *Translating is comprised of accessing a first storing unit configured to store transformation information, wherein the first storing unit is coupled to the processor;*
- *Accessing a second storing unit configured to store defined business processes, wherein the second storing unit is coupled to the processor; and*
- *Using a business process controller configured to execute the business processes, wherein the execution is in response to predefined events.*

Knauss in at least Figure 2, Column 3, lines 1-22 and Column 4, lines 30-55 discloses a computer coupled to computer readable data storage medium with computer executable code used for receiving and translating source data to a target document. Knauss in at least Column 9, lines 44-47 discloses that the data may be written to a writable memory or other types of writable memory devices, as is known to those skilled in the art.

Knauss in at least Fig.10, Fig.11 and Column 9, lines 11-58 documents the business processes for translating one document object format to another format.

Knauss in at least Fig.10, Fig.11 and Column 9, lines 11-19 further discloses that the translators may be implemented as computers programmed to perform document or message translation.

Examiner's Note: Claim limitations that employ phrases of the type "Capable of or Configured to" are intended use limitations which may not distinguish over the prior art. It has been held that the recitation that an element is "capable of" performing a function is not a positive limitation, but only requires the ability to perform. MPEP 21114 and Ex parte Masham, 2 USPQ2d 1647 (1987)

Claims 2-9, 14-21 and 23-28:

Regarding the limitations:

- *Interchanging invoice adjustment information between software applications,*
- *Translating the invoice adjustment information into a format useable by the receiving software application,*
- *The invoice adjustment data uses extensible markup language format,*

Knauss in at least Column 6, lines 13-20 further discloses a system and method enabling automatic translation of EDI data to or from a self-describing markup language format such as XML, or an XML dialect, by way of a virtual document. Knauss in at least Column 5, lines 38-48 still further discloses that an EDI message is a data element and may be an invoice or purchase order. Each data element may represent a singular fact, such as a price, product, model number, and so forth.

Knauss in at least FIG.4 and Column 6, lines 36-51 further discloses links or mappings to the variables of a virtual document and to and from the source data model and the target data model. Knauss in at least Column 9, lines 48-58 and Column 10, lines 1-3 further discloses that under control of the translator, values are written into the variables of the virtual document from the source data model in a data stream from the source data model to the target data model. Knauss in at least Column 9, lines 59-67 still further discloses that multiple target documents may be populated using data obtained from a single source document.

- ***Determining essential data elements from one format and converting to a another format,***
- ***Essential data elements include identification, invoice adjustment, billing, status, and a list of invoice adjustment line item detail elements.***

Knauss does not specifically disclose the essential data elements as being identification, invoice adjustment, billing, status, and a list of invoice adjustment line item type of elements. However, Knauss in at least Fig.6 and Column 10, lines 43-63 discloses identifying the source elements and mapping them to the destination elements. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill to modify Knauss to include those essential data elements (identification, invoice adjustment, billing, status, and a list of invoice adjustment line item detail elements, employee data element, invoice element, and a comments element) with the motivation of insuring that all important data from the source document is mapped to the proper location in the destination document.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/

Examiner, Art Unit 3627

12 June 2009

/F. Ryan Zeender/

Supervisory Patent Examiner, Art Unit 3627